



Nevada's Big Tree Program

Wanted – the biggest trees in Nevada

The Nevada Division of Forestry's State Big Tree Program is searching for the largest specimen of every native and introduced tree species growing in Nevada. Nevada's program started in 1992 and the first register listed 70 trees. The current [Nevada Big Tree Register](#) has grown to 264 tree species, [varieties and cultivars](#). Nevada's Big Tree Program shows a commonly held myth to be untrue: not only does Nevada have trees, but the state has a great diversity of large trees, both native and introduced.

Nevada's program is patterned after the American Forests National Champion Trees program which recognizes the biggest tree of every species growing in the United States and encourages their preservation. American Forests (formerly the American Forestry Association) published its first [National Register of Big Trees](#) in 1940 and currently lists 861 trees. Unlike the Nevada program, the National program does not include varieties and cultivars. Criteria for inclusion on the National Register of Big Trees are the following:

Trees are defined as: "woody plants with one erect perennial stem or trunk at least 9 ½ inches in circumference (3 inches in diameter) at 4 ½ feet above the ground (breast height), a definitely formed crown of foliage, and a height of at least 13 feet." *American Forests Big Tree Register website*

"To be eligible for listing in the National Register of Big Trees, a species must be recognized as native or naturalized [grown without cultivation] in the continental United States, including Alaska but not Hawaii. Hybrids and minor varieties are excluded. To determine [species] eligibility, American Forests uses Elbert L. Little Jr.'s *Checklist of United States Trees (Native and Naturalized)*, U.S. "Department of Agriculture Handbook 541 (1979)."

Big Tree candidates are compared on a point basis; the tree with the highest point total becomes the champion. [Measuring guidelines](#) assign one point for each inch of circumference (measured 4.5 feet above the average ground level around the tree), one point for each foot of height, and ¼ point for each foot of crown spread (measured as the average of the largest spread in feet and the spread in feet measured perpendicularly). In some cases, two trees may have nearly identical scores. In Nevada's register, trees within 10 points of each other are considered co-champions.



Black locust in Genoa.

Two examples of the size of a tree by points: the 100-point Nevada Champion European alder is 47 inches in circumference (one foot in diameter), 45 feet tall, has a maximum crown spread of 33 feet, a perpendicular crown spread of 30 feet for an average of 31 feet (divided by 4 equals 8 crown points by rounding up). The 200-point Nevada Champion deodar cedar is 128

inches in circumference (three feet in diameter), 56 feet tall and has crown spreads of 64 and 60 feet respectively (average 62 feet, divided by 4 equals 16 crown points by rounding up).

Nominations to the Nevada register are accepted year-around and the list is updated every two years. Many champion trees in Nevada are still waiting to be discovered, including those on this list of [trees with no champions](#). Big Trees may be found in city parks, yards and ranches around the state. Others are hidden in the mountains or in forests and can be found by hikers and outdoor enthusiasts. Some of these trees could even be National Champions, the largest tree of its kind in the United States.

Nevada currently has two National Champions, a [turbine oak](#) in Spring Mountain State Park and a [Great Basin bristlecone pine](#) in the USFS Spring Mountains National Recreation Area; both trees are near Las Vegas. Nevada's program recognizes trees that are not on the National Big Tree Register, but which

- Nevada's tallest tree: Jeffrey pine, Douglas County, 159 feet
- Nevada's largest circumference tree: Great Basin bristlecone pine, Clark County, 455 inches (12 feet diameter)
- Nevada's tree with most points: Fremont cottonwood, Washoe County, 524 points

are common in landscapes throughout Nevada. Several states also include these trees on their rosters ([other states' Big Tree registers](#)) and a number of Nevada trees [rival or exceed](#) the points of other states' champions.

Introduced Trees

Of the 264 trees on the Nevada register, 42 are natives and 222 are introduced. Many of the introduced trees were planted only a few decades ago and are obviously not as big as champion trees growing in their native habitats. We refer to these introduced trees as "up-and-coming trees" (page 19 of the Big Tree Register). For comparison, the shingle oak planted in 1998 in Idlewild Park, Reno, is 35 inches in circumference (one foot in diameter), 50 feet tall with maximum and perpendicular crown spreads of 25 feet and 21 feet respectively (six crown points), for a total of 93 points. The National Champion in Cincinnati, Ohio is 219 inches in circumference (four and a half feet in diameter), 102 feet tall with an average crown spread of 62 feet.

The Register has Changed

There have been numerous changes to the list since the last edition was published in 2003:

- Five Big Trees were removed because the trees died and no replacement has been nominated. These include Arizona rosewood, fan-text ash, common fig, Gooddings willow and Russian olive.
- 12 Big Trees were dethroned when larger specimens were found including curlleaf mountain mahogany, black willow and American chestnut.
- 12 co-champions were added including Siberian elm, common horsechestnut and fruitless mulberry.
- 83 new species, varieties and cultivars were added to the new register.

Big Trees are Valuable

[i-Tree Streets](#), a program designed by both the USDA and private industry, uses tree inventory data to quantify the dollar value of annual environmental and aesthetic benefits: energy conservation, air quality improvement, CO2 reduction, stormwater control, and aesthetics. This program was used by Tina McKeand, Davey Resource Group and the Nevada Shade Tree Council, to evaluate these five parameters for trees on the Nevada register. In [Trees Work 4 Nevada!](#), she explains the program and shows the results and the replacement value for the largest 25 trees in Nevada.

A Call to Trees

Are you interested in becoming a Big Tree Hunter? Do you have a potential big tree in your backyard or near your favorite hiking trail? Many of the listed trees are in easily viewed arboreta on the University of Nevada campuses in Las Vegas and Reno, the Wilbur D. May Arboretum and Botanical Garden in Reno, the Ethel M. Chocolates Botanical Cactus Garden or the Springs Preserve Botanical Gardens in Las Vegas, or are street trees, but others are hidden in private yards and other inaccessible areas. We may not see your tree, but you see it every day. If you think it is a candidate Big Tree, please contact us and we will send someone to identify and measure it. If it measures up, we will be happy to add it, and your name as nominator, to the list.



Nominator and Big Tree Register Editor Rod Haulenbeek relaxing under Nevada's Champion Western white pine.

Educators - check out these learning resources!

[Project Learning Tree](#) (PLT). American Forest Foundation's environmental education program has high quality curriculum materials for students in grades PreK-12.

[National Arbor Day Foundation](#) activities on teaching older children and youth about trees.

[California's PLT program](#) training modules: Focus on Forests, Forest Ecology and Forests of the World.

Big Tree Program Contact:

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External Links of Interest

[American Forests National Register of Big Trees \(2010\)](#). Includes measurements for 861 species of National Big Trees for the United States, methods for measuring trees and FAQs.

[American Forests Big Tree Coordinators](#). Lists coordinators for 50 states, Puerto Rico and Washington, D.C. as well as links to state registers.

[American Forests Measuring Guidelines](#). Explains standardized methods for measuring Big Trees.

[Texas Big Tree Measuring Guidelines](#). One of the best websites about measuring Big Trees; recommends methods for beginners, including using a ruler or pencil; has diagrams for measuring trees on slopes and leaning trees.

[Selectree](#). Helps you select a tree for your yard from a list of more than 1000 trees.

[Integrated Taxonomic Information System](#)

(ITIS). Taxonomic information on plants, animals, fungi and microbes of North America and the world; gives sources for information.

[The USDA Plants Database](#). Standardized naming and description for plants of the U.S. and its territories; has a lot of information.

[What Tree is That?](#) National Arbor Day Foundation's guide to tree identification is available in both an online interactive version and can be accessed from mobile devices.

The [Temperate Interior West Community Tree Guide: Benefits, Costs, and Strategic Planting](#) offers another way to determine the dollar value of community trees by ecosystem services and also provides calculations on maintenance costs so benefit to cost ratios can be determined.

NDF's Urban Forestry Program sponsors the Big Tree Program with support from the US Forest Service.